SMART GRID INVERTER GTB-600 Manual

Parameter Table

Model	GTB-600	
Maximum input power	600Watt	
Peak power tracking voltage	22-50V	
Min / max starting voltage	22-55V	
Maximum DC short-circuit	30A	
Maximum input operating current	27.2A	
Output Data	**@120V**	**@230V**
Peak power output	600Watt	600Watt
Rated output power	600Watt	600Watt
Rated output current	5A	2.6A
Rated voltage range	80-160VAC	180-260VAC
Rated frequency range	48-51/58-61Hz	48-51/58-61Hz
Power Factor	>99%	>99%
Max unit per branch circuit	5pcs (Single-phase)	10pcs (Single-phase)
Output Eifficiency	**@120V**	**@230V**
Static MPPT efficiency	99.5%	99.5%
Maximum output efficiency	95%	95%
Night time power consumption	<1W	<1W
THD	<5%	<5%
Exterior & Feature		
Ambient temperature range	-40°C to +60°C	
Dimensions (L × W × H)	280mm×200mm×40mm	
Weight	1.62kg	
Waterproof rating	IP65	
Cooling	Self-cooling	
Communication Mode	WiFi mode	
Power transmission mode	Reverse transfer , load priority	
Monitoring System	Mobile APP, PC browser	
Electromagnetic Compatibility	EN50081.part1 EN50082.Party1	
Grid disturbance	EN61000-3-2 Safety EN62109	
Grid detection	CE EN-50438	
Certificate	CE ,	

Notes:

★Please connect the inverter following the operation instruction show above. If have any question please contact with relative persons.
★Non-professionals do not disassemble.Only qualified personnel may repair this product.
★Please install inverter in the low humidity and well-ventilated place to avoid the inverter over-heating,and clear around the inflammable and explosive materials.
★When using this product, avoid children touching, playing, to avoid electric shock.
★Connected solar panels, battery or wind generators DC input DC power supply cable.

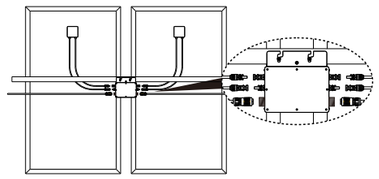
Accessories for product:

1.One warranty card;
2.One user manual;
3.One certificate of quality;
4.1 pouch of screw for micro inverter installation;
5.One AC Cable;

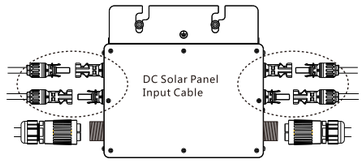
LED Display

1.Red light 3 second---Red LED light 3 second while device starts , then in working condition;
2.Green flash fast---MPPT searching;
3.Green flash slow---MPPT + searching;
4. Red flash slow---MPPT - searching;
5.Green lights on 3s and off 0.5s---MPPT locked;
6.Red light steady---a.Islanding protection;
b.Over-temperature protection;
c.Over / low AC voltage protection;
d. Over / low DC voltage protection; e.Fault
Remarks:
LED flashing in the process of being working condition:inverters connected to AC & DC sides→ Red LED light 3 second→Green LED flash fast(MPPT searching)→Green LED flash slow(MPPT + searching) / Red LED flash slow (MPPT - searching) / reen LED lights on 3s and off 0.5s (MPPT locked) .

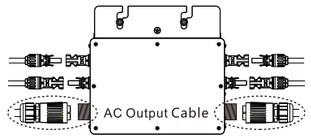
Step1 Installation for fixed the inverter on the PV holder with the screws attached is as following:

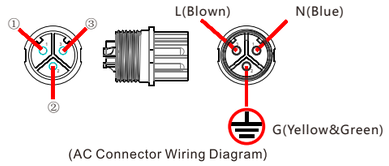


Step2 Connect the two DC terminal of the PV to the inverter, positive to positive, negative to negative. Show below:



Step3 Open the waterproof cap on AC output side of the micro inverter, then plug to AC power line. Show below:

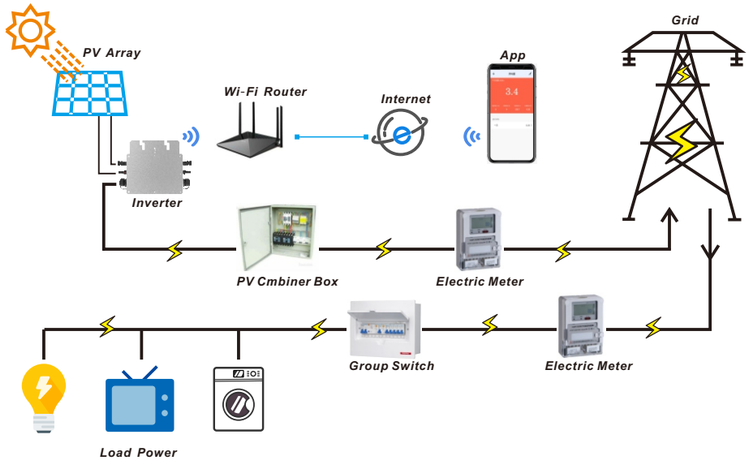




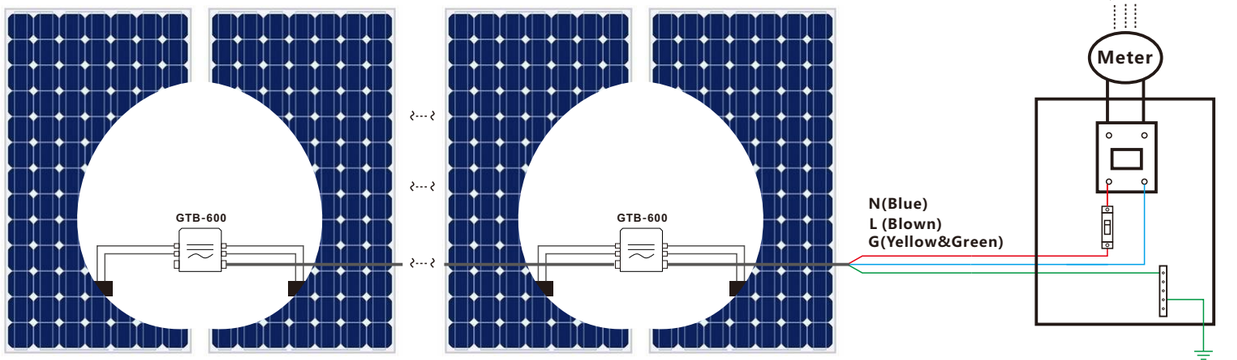
(AC Connector Wiring Diagram)

Step4 Plug the AC output line to main AC cable;
Step5 Repeat the first step to the third step to complete the installation of micro inverters;
Step6 Finally, please connect the AC main cable to the utility grid.

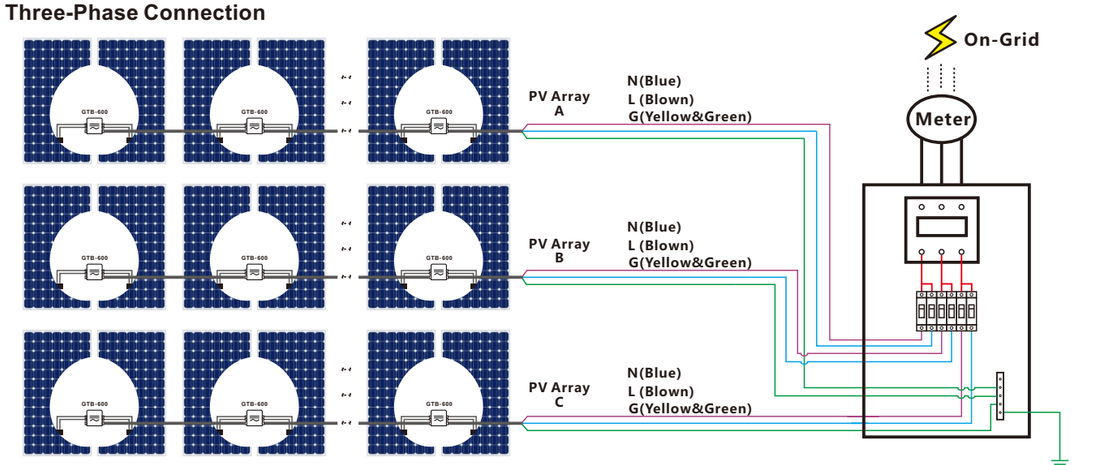
Structure of Solar power system



Single-Phase Connection

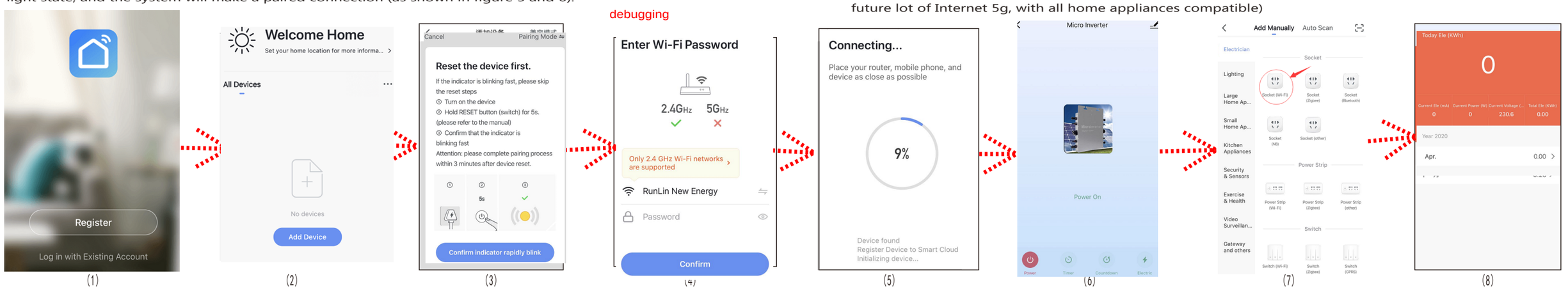


Three-Phase Connection



PV Monitoring System Operating Instructions

1. Download 'smart home' or direct scan code to the right qr code and install the monitoring system app(the multi-language language of the ios system);
2. Click and create the new user to register the account;
3.Please enter the password and confirm the password when you enter the password in the family.
4. After entering the wi-fi password, the inverter will remain in the normal working green light state, and the system will make a paired connection (as shown in figure 5 and 6).

.Before installation, switch on AC power for APP monitoring and debugging

5. After the inverter is added correctly, and the photovoltaic system is in normal operation during grid-connection, it will be shown that the inverter is turned on (see figure 6).)
6. If the inverter is not running in the current network, it will be shown as the inverter is closed (see figure 7).
7, click each inverter, will be able to view the inverter data statistics, more functions, please click in the APP to check
Note: install multiple inverter app monitoring operation procedure. (the system is designed for the future lot of Internet 5g, with all home appliances compatible)